

FINDING OF NO SIGNIFICANT IMPACT
TENNESSEE VALLEY AUTHORITY
Holly Springs-Miller 161-kV Transmission Line Tap to Coldwater
Substation, Marshall County, Mississippi

The Tennessee Valley Authority (TVA) proposes to construct and operate a 5.6-mile, 161-kV transmission line connecting Holly Springs Utility Department's (HSUD) planned Coldwater Substation with TVA's Holly Springs-Miller 161-kV Transmission Line. The transmission line would utilize both existing and new right-of-way (ROW), mostly 75 feet in width (700 feet would be 100-foot width) and would occupy approximately 53 acres. The proposed action is in the Mt. Pleasant area of Marshall County, Mississippi.

The proposed action will address reliability problems resulting from area growth and transformer thermal problems affecting HSUD's Slayden Substation currently supplied by a 15-mile-radial 46-kV line from the Holly Springs 161-46-13-kV Substation. The electric load in the Mt. Pleasant area has been growing rapidly over the past several years due to growth from Collierville and Memphis, Tennessee. The distributor expects growth in this area to increase in the future due to planned road development including the new I-269 that will connect to I-40 and I-55 and U.S. Highway 78 (future I-22). The proposed transmission line would serve the Coldwater Substation and would provide a more reliable connection to the TVA power grid and avoid power supply disruptions to the HSUD system.

TVA has reviewed the proposed action and reasonable alternatives in an Environmental Assessment (EA) in accordance with its procedures implementing the *National Environmental Policy Act (NEPA)*. This EA is incorporated by reference.

Two primary alternatives (i.e., the No Action Alternative and an Action Alternative) were developed. Under the No Action Alternative, TVA would not construct and operate the new transmission line and the capacity and reliability problems affecting HSUD in the project area would continue.

Under the Action Alternative, TVA would construct and operate a 5.6-mile, Holly Springs-Miller 161-kV Transmission Line tap to the Coldwater Substation. The transmission line would be built on 3.8 miles of existing ROW 75-feet-wide, currently occupied by approximately 2.7 miles of HSUD 46-kV transmission line and 1.1 miles of HSUD 13-kV transmission line. HSUD would be responsible for removing and disposing of the existing 46-kV transmission line equipment. Additionally, 1.7 miles of the proposed transmission line would be built on a new 75-foot-wide ROW between the Holly Springs-Miller 161-kV Transmission Line tap and the existing HSUD ROW, and 700 feet would be built on new 100-foot-wide ROW between the Coldwater Substation and Taska Road. The wider ROW in this section would be needed because the TVA transmission line would share the ROW with HSUD's 46-kV transmission line. The total project right-of-way would occupy about 53 acres. The line would be built with single steel-pole structures. The preferred route of the transmission line analyzed as part of the Action Alternative was selected from among several potential routes in order to minimize impacts to natural and cultural resources, impacts to property owners, and other factors.

Based on the analysis in the EA, TVA concludes that the Action Alternative would have minor and insignificant impacts on groundwater, surface water, aquatic ecology, vegetation, and wildlife. No federally or state-listed endangered or threatened species would be affected.

Two relatively low-quality wetlands with a combined total of 0.48 acres occur within the proposed ROW. Because these are emergent/scrub-shrub wetlands, no vegetation clearing within the wetlands would be necessary and impacts to wetlands would be insignificant.

Portions of the transmission line would be located in identified floodplains. Construction in these areas would not result in any increase in flood hazard, and the proposed action is consistent with the Executive Order on Floodplains. The project is compatible with current land uses, and the proposed action would not negatively affect prime farmland. Impacts to recreation activities, transportation, and visual and aesthetic resources would be insignificant.

The proposed transmission line was designed to minimize impacts to historic properties and TVA has determined that historic properties eligible for or listed on the National Register of Historic Places would not be adversely affected. The Mississippi State Historic Preservation Officer concurred with this determination in a letter dated March 19, 2007.

Mitigation

The following routine measures would be applied during construction and operation of the proposed transmission line, switches, and associated facility improvements:

General Best Management Practices (BMPs) for Clearing, Construction, and Maintenance

TVA practices detailed in Appendices II, III, IV, V, and VI of the EA will be used during clearing, construction, and maintenance. EO 13112 directs all federal agencies to prevent and control the introduction and spread of invasive species resulting from their activities. TVA will use reseeding mixes that are certified free of invasive, exotic plant seeds when replanting disturbed areas.

Protection of Aquatic Resources

- All intermittent and perennial watercourse crossings will be designated as Category A, Standard Stream Protection. Protection levels for each watercourse crossing are identified in Appendix VII of the EA.

Watercourses that convey surface water only during storm events (i.e., wet-weather conveyances) and that could be affected by the proposed transmission line route will be protected by standard BMPs as identified in Muncy (1999). These BMPs are designed in part to minimize erosion and subsequent sedimentation in streams.

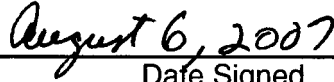
No non-routine mitigation measures were identified as necessary to further reduce the anticipated environmental impacts.

Conclusion and Findings

Based on the findings listed above and the analyses in the associated EA, we conclude that the construction and operation of the proposed new transmission line would not be a major federal action significantly affecting the quality of the environment. Accordingly, an Environmental Impact Statement is not required. This conclusion takes into account the implementation of the standard commitments such as the use of BMPs.



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Date Signed

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